

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **01-318078**

(43)Date of publication of application : **22.12.1989**

(51)Int.Cl. **C09K 11/08**
// H01J 31/15

(21)Application number :	63-149602	(71)Applicant :	NICHIA CHEM IND LTD
(22)Date of filing :	17.06.1988	(72)Inventor :	KIMURA KAZUHIRO SUMITOMO MITSUSACHI UCHIMURA KATSUNORI

(54) SLOW ELECTRON BEAM-EXCITED PHOSPHOR AND ITS PRODUCTION

(57)Abstract:

PURPOSE: To obtain a phosphor of an improved luminance by coating the surface of a phosphor with particles of a specified conductivity imparting substance.

CONSTITUTION: In and Ti are coprecipitated in the form of a carbonate, oxalate, succinate or hydroxide, and the obtained precipitate is burned at 600-1800°C for 1-12hr to obtain particles (b) of a conductivity imparting substance having a particle diameter of 0.01-5 μ m and comprising an indium titanate compound of the formula



(wherein $0 < x \leq 4$; $0 \leq y \leq 2$; and M is Sn, Sb, W, Zn, Cd, Nb or K). The surface of a particle of a phosphor (a) selected from a sulfide phosphor (i) wherein the matrix is ZnS, (ZnCd)S or CdS, the activator is Ag, Zn, Cu, Au or Mn, the first coactivator is Cl, Br, I, F or Al, and the second coactivator is Na, K, Li or the like, an oxide, aluminate or silicate phosphor (ii) wherein the matrix is ZnO, SnO₂ or the like, and the activator is Zn, Eu or the like, an oxysulfide phosphor (iii) wherein the matrix is Y₂O₂S, Gd₂O₂S or the like, and the activator is Eu, Tb or the like, and a phosphate phosphor (iv) wherein the matrix is LaPO₄ or the like, and the activator is Mn, Ce or Tb is coated with 0.1-25wt.% component (b).

